



August 6, 2008

Loudoun County
Department of Building and Development
1 Harrison Street, SE
Leesburg, VA 20177



RE: T-Mobile Northeast LLC
Site WAN463
21415 Cardinal Glen Circle, Sterling, VA 20164

To Whom It May Concern:

T-Mobile Northeast LLC ("T-Mobile"), a FCC licensed E-Block digital PCS service provider, respectfully requests that the Loudoun County Department of Building and Development review a proposed commission permit application for T-Mobile to install a proposed telecommunication facility located at 21415 Cardinal Glen Circle, Sterling, VA 20164. The application is for collocation of telecommunications antennas onto an existing rooftop. This application is substantially in accord with the Loudoun County 1993 Zoning Ordinance Section 5-618. T-Mobile's FCC license covers the Greater Washington and Baltimore Metropolitan areas, including Loudoun County and other areas of Northern Virginia.

APPLICANT:

T-Mobile Northeast LLC ("T-Mobile")
12050 Baltimore Avenue
Beltsville, MD 20705
Tel: 240-264-8616
Fax: 240-264-8604

SITE LOCATION:

Address: 21415 Cardinal Glen Circle
PIN #: 013-25-8465-000
Tax Map #: /81/G/1////E/
Zoning District: R-4
Use: Church



DESCRIPTION OF PROPOSED USE:

T-Mobile proposes to install an unmanned wireless telecommunications facility which will consist of six (6) antennas mounted on to the Bahá'í Faith Center building rooftop, located at 21415 Cardinal Glen Circle, Sterling, VA 20164. T-Mobile's antennas will be sled mounted to



provide an approximate antenna centerline of 43.5 feet (Sector A), 45.5 feet (Sector B) and 49.5 feet (Sector C). In addition to the antennas, T-Mobile will install two ancillary equipment cabinets on a 10' x 18' platform located on the roof, which will be screened by a brick wall. This facility is sought to fill a much-needed gap in wireless coverage along Route 7 and to provide coverage in the surrounding neighborhoods.

The facility will operate automatically and will not require personnel or hours of attendance. It will operate twenty-four (24) hours a day, three hundred and sixty-five days a year. Maintenance personnel will visit the site occasionally for repairs or modifications to the facility.

REQUIREMENT FOR PROPOSED USE:

The proposed facility is a vital component of T-Mobile's area-wide wireless telecommunications network. T-Mobile proposes to make use of an existing structure to eliminate the need for a new telecommunications tower in this search area and to minimize the visual impact of the project on surrounding property owners. This site is not only strategically superior to other sites in the area, but also makes use of an existing structure which is a stated goal of the Loudoun County Zoning Ordinance.

Telecommunications carriers must locate antenna sites according to a network design within relatively limited geographic parameters in order to provide uninterrupted coverage. When carriers cannot locate a site within these geographic parameters, network users will pass through an area where the lost signal results in interrupted or "dropped" calls. This poses a significant safety problem, both from the standpoint of lack of coverage in emergencies and because an interrupted call may mean a dangerous distraction to drivers. In addition, an incomplete system is inconsistent with T-Mobile's legal requirements to provide continuous coverage and to provide coverage to a percentage of the population within specific time parameters as required by its FCC license.

This site offers both an excellent land-use and visual solution to T-Mobile's coverage objective within the narrow placement parameters of this particular search area. T-Mobile's analysis of its network indicates that there are significant coverage problems along Route 7 in the Cardinal Glen area in this part of Loudoun County. T-Mobile is making use of this existing structure to avoid constructing a new monopole or tower. Consequently, this facility will be the least disruptive means to provide the needed coverage in the area.

ANTICIPATED IMPACTS ON ADJOINING PROPERTIES

The proposed facility will have no impact as to traffic, noise, light pollution, air quality, water quality, or radiation on adjoining properties. As stated previously, this proposal will make use of an existing structure so that there will be little to no adverse visual impact on surrounding properties.



RELATIONSHIP OF THE PROPOSAL TO CPAM 1996-0003, STRATEGIC LAND USE PLAN FOR TELECOMMUNICATIONS FACILITIES BOS

The proposed facility is consistent with and furthers the goals of the Comprehensive Plan.

- A. *Location Policies – The Location Policies establish a hierarchy of preferred locations for new commercial public communication facilities. The County's first preference is to have new antennas collocate on existing tall structures, monopoles and towers in order to minimize the need for new towers and monopoles.***

By making use of a preferred tall structure, an existing rooftop, T-Mobile is furthering the goals of the Comprehensive Plan.

B. *Design Standards*

- 1. *Countywide Visual Impacts – The visual impact of commercial public telecommunication facilities should be mitigated so as to blend with the natural and built environment of the surrounding area.***

By utilizing an existing rooftop and painting the antennas, mountings and equipment to match, T-Mobile is mitigating the visual impact of the facility. The sled-mounting design, which will be employed at this facility, has several benefits for this particular facility:

- In keeping with the character of the area, sled-mounting is currently utilized at other wireless facilities along Route 7; and
- As was requested by the landlord, a sled-mounted design would be least likely to take away from the unique architectural character of the building.

RELATIONSHIP OF THE PROPOSAL TO THE ZONING ORDINANCE

The proposed facility is consistent with and furthers the transcendent goals of the Loudoun County Zoning Ordinance Section 5-618.

The location, character and extent of the application should be found to be in substantial accord with the Zoning Ordinance. In terms of location, properties that contain existing structures are encouraged by the ordinance for new site development. In addition, making use of this type of collocation is a common siting solution for wireless carriers in Loudoun County, Virginia.

Regarding the character of the proposal, this is a Church property and the antennas and equipment will be painted to match the rooftop. In addition, the proposed facility poses no encroachment on any existing easements or services, and the height is the minimum needed to serve the facility's goals for the applicant.



Under the “Telecommunications Use And/Or Structures” section 5-618, it states:

(A) Antennas. Structure mounted and roof top mounted antennas and related unmanned equipment may be developed subject to the performance standards below to the extent permitted by right in the district use lists.

- (1) Antennas and related unmanned equipment are permitted on an existing telecommunications monopole, telecommunications tower, or structure forty (40) feet or greater in height in all zoning districts subject to the performance standards outlined in this section.***

By making use of an existing 40’ rooftop, T-Mobile has avoided the construction of a new structure, and thus furthered this objective of the zoning ordinance.

- (5) Directional or panel antennas shall not exceed five (5) feet in height or two (2) feet in width and shall be of a material or color which matches the exterior of the building or structure.***

T-Mobile will install antennas that measure 59” in height, 11.9” in width, and 6.3” in depth. The antennas and mountings will be painted to match the existing structure. See Exhibit A (Antenna Specs).

- (7) No commercial advertising shall be allowed on any antenna.***

T-Mobile will not place any commercial advertising on the antennas.

- (9) The related unmanned equipment structure(s) shall not contain more than 500 square feet of total gross floor area per user on each site. Structures shall not exceed 12 feet in height. The structure shall be of a material or color which matches the exterior of the building or structure.***

T-Mobile will install two (2) equipment cabinets that will blend with the existing rooftop and will not exceed the 12 foot height limitation. The square footage for the equipment platform is 180 square feet.

- (10) If the equipment structure is located on the roof of a building, the area of the equipment and structures shall not occupy more than twenty-five (25) percent of the roof area.***

T-Mobile’s equipment platform will occupy only 5% of the entire roof area.



There is no underlying zoning history on the parcel. Please contact me if you have any questions with reference to this submission at Amy.Bird3@T-Mobile.com or (240) 264-8616.

Kind Regards,

A handwritten signature in blue ink, appearing to read 'Amy Bird'.

Amy Bird
Zoning Manager
Network Building & Consulting, LLC
Consultant for T-Mobile Northeast LLC